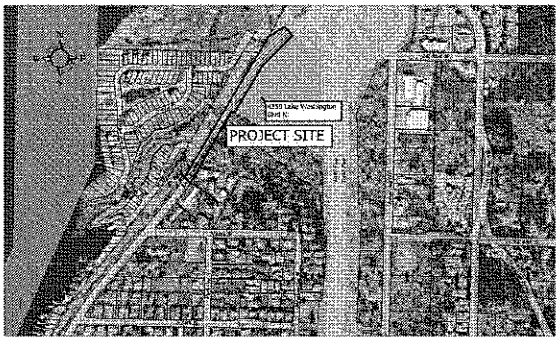
DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT

City of Renton

ENVIRONMENTAL REVIEW COMMITTEE REPORT

ERC MEETING DATE:	July 19, 2010		
Project Name:	Lake Washington Blvd. Storm Improvements		
Owner:	City of Renton, City right-of-way, Renton, WA 98057; and Port Quendall Company, 4350 Lake Washington Blvd. N, Renton, WA 98057		
Applicant/Contact:	City of Renton Surface Water Utility, Attn: Steve Lee, 1055 South Grady Way, Renton, WA 98057		
File Number:	LUA10-041, ECF, SM		
Project Manager:	Vanessa Dolbee, (Acting) Senior Planner		
Project Summary:	The applicant is requesting SEPA Environmental Review and a Shoreline Substantial Development Permit for the installation of curb/gutter and portions of a sidewalk, a new storm system, and a water line extension within Lake Washington Blvd. N. to meet the infrastructure needs for future development in the vicinity of the I-405 Exit 7 area. The project is primarily located within the existing right-of-way of Lake Washington Blvd. N adjacent to 4350 Lake Washington Blvd. N. However, a small portion for the proposal would extend onto private property located at 4350 Lake Washington Blvd. N. The proposed curb and gutter would extend on the east side of Lake Washington Blvd. N. from Ripley Lane N. approximately 600 feet south; and curb, gutter and sidewalk will continue south on the east side of Lake Washington Blvd. N. to connect to the existing bridge over May Creek. The new storm system would consist of approximately 810 lineal feet of 24-inch storm pipe with a catch-basin collection system and the new water line extension would consist of about 1,450 feet of 12-inch water line in Lake Washington Blvd. N. from NE 40th St. to NE 44th St. The project also includes a wet bioswale, approximately 140 lineal feet. The applicant has provided stream and wetland studies, a traffic study, a geotechnical report, and a hydrologic analysis with their application.		
Project Location:	Lake Washington Blvd. N right-of-way fronting 4350 Lake Washington Blvd. N		
Exist. Bldg. Area SF:	N/A	*Proposed New Bldg. Area (footprint):* *Proposed New Bldg. Area (gross):*	N/A N/A
Site Area:	34,000 sq. ft.	*Total Building Area GSF:*	N/A
STAFF RECOMMENDATION:	**Staff Recommends that the Environmental Review Committee issue a Determination of Non-Significance - Mitigated (DNS-M).**		



Project Location Map

PART ONE: PROJECT DESCRIPTION / BACKGROUND

The purpose of the project is to install curb/gutter and portions of a sidewalk, a new storm system, and a water line extension within Lake Washington Blvd. N. to meet the infrastructure needs for future development in the vicinity of the I-405 Exit 7 area, including the Hawks Landing development. The proposed infrastructure's design expands beyond the existing right-of-way(ROW); therefore, a portion of the development would occur on private property located on the east side of Lake Washington Blvd. N. The small portion of the project that would occur outside of the existing ROW would be located on the site commonly known as the Pan Abode Site (Tax Parcel# 3224059049, 4350 Lake Washington Blvd. N). The applicant has indicated that a portion of the Pan Abode Site would need to be dedicated to the City for the proposed sidewalk and storm drainage improvements. The width of the necessary dedication would vary from 9.5 feet wide to only a few feet wide as you move north along the frontage. Other portions of the project, including the wet bioswale could be maintained in easements and a dedication would not be required.

Existing ROW does not receive a land use or zoning designation, however, private property does. The Pan Abode Site is located within the Commercial/Office/Residential (COR) land use designation and zoning designation in addition to being located within Urban Design District "C" overlay. The proposed improvements are permitted within the COR zone and would meet all the development standards where applicable.

The project area is comprised of an eclectic mix of development types, styles, and zones. On the east side of Lake Washington Blvd. N is property zoned COR, Residential 8 (R-8), and Residential 10 (R-10) unit per net acre and on the west side, the property is zone COR and R-8. The many different land uses surrounding the site include, but are not limited to, paired homes in the Barbee Mill development, single-family residential, multi-family residential, old industrial, the Virginia Mason Athletic Center (VMAC), and vacant property.

The following list describes each part of the proposed project:

- Curb and Gutter: The curb and gutter would extend on the east side of Lake Washington Blvd. N. from Ripley Lane N. approximately 600 feet south; and curb, gutter and sidewalk would continue south on the east side of Lake Washington Blvd. N. to connect to the existing bridge over May Creek.
- Pervious Sidewalk: The sidewalk would be installed from approximately 270-feet north of the May Creek Bridge to the existing May Creek Bridge sidewalk connection. The sidewalk is proposed to be 12-feet wide with a 10-foot landscape strip behind the curb and be made of porous concrete.
- Stormwater System: The stormwater system would collect road, curb, gutter, and sidewalk runoff and provide water quality treatment for a portion of the existing road prior to discharging to an existing stormwater system flowing to May Creek. The new storm system would consist of approximately 810 lineal feet of 24-inch storm pipe with a catch-basin collection system capable of carrying traffic loading.
- Wet Bio swale: The project also includes a wet bio swale, approximately 140 lineal feet (top length) of which, will be used to treat a portion of the runoff from Lake Washington Blvd. N. One 20-foot wide gravel maintenance access road is proposed off of Lake Washington Blvd. N. The landscape strip is proposed to terminate just north of the maintenance access road.

- Water Line: The water line extension consists of the installation of about 1,450 feet of 12-inch water line in Lake Washington Blvd. N. from NE 40th St. to NE 44th St. A 100-foot portion of the water line will be installed inside an existing 18-inch steel casing within the May Creek Bridge.

To complete the proposed infrastructure improvements approximately 2,380 cubic yards of cut would occur and approximately 2,450 cubic yards of fill would be imported from licensed gravel pits. In addition, various franchise utilities may need to be relocated to accommodate the stormwater and water line construction including, but not limited to, power poles, fiber optic, telephone and gas/power.

As identified on the City of Renton Sensitive Area Maps, the Pan Abode site and portions of ROW contain seismic hazards and flood hazards. In addition, just south of the site is May Creek, a Class 1 water. The drainage ditch that runs immediately adjacent to Lake Washington Boulevard has been identified by the applicants provided Wetland/Stream Study as a Class 5 non-regulated stream with an associated non-regulated wetland.

PART TWO: ENVIRONMENTAL REVIEW

In compliance with RCW 43.21C.240, the following environmental (SEPA) review addresses only those project impacts that are not adequately addressed under existing development standards and environmental regulations.

A. Environmental Threshold Recommendation

Based on analysis of probable impacts from the proposal, staff recommends that the Responsible Officials:

Issue a DNS-M with a 14-day Appeal Period.

B. Mitigation Measures

1. The applicant shall comply with the recommendations found within the Geotechnical Study, prepared by S&EE, Inc., dated March 17, 2010.
2. The applicant shall comply with the recommendation included within the Archaeological Assessment completed by Landau Associates, dated December 24, 2009.

C. Exhibits

Exhibit 1	Neighborhood Map
Exhibit 2	Project Cover Sheet
Exhibit 3	Project Sheet 3
Exhibit 4	Project Sheet 4
Exhibit 5	Project Sheet 5
Exhibit 6	Project Details, Sheet D-1

D. Environmental Impacts

The Proposal was circulated and reviewed by various City Departments and Divisions to determine whether the applicant has adequately identified and addressed environmental impacts anticipated to occur in conjunction with the proposed development. Staff reviewers have identified that the proposal is likely to have the following probable impacts:

1. Earth

Impacts: With the project application, the applicant submitted a Geotechnical Study prepared by S&EE, Inc., dated March 17, 2010. The study indicated that the majority of the proposed storm line would be located in the existing roadside drainage ditch and the water line would be located in the road shoulder just to the west of the drainage ditch. The bottom of this ditch is 4 to 6 feet below the street level, resulting in the need for approximately 5 to 6 feet of fill to bring the ground to street level, for sidewalk construction. The majority of the ditch is 5-feet in width at the bottom with the exception of the northern section where the ditch reaches 15 feet in width. An existing single-story, metal building is present along the east side of the ditch, at the closest point the building is approximately 10-feet from the centerline of the ditch.

Pursuant to the provided Geotechnical Study, the subsurface soil conditions along the storm line show relatively consistent conditions. The subsurface soils include existing fill, recent sedimentary deposits about 20-feet thick and glacial soils that are found at about 30 feet below the ground surface.

S&EE completed their field exploration on December 28, 2009; at this time 6 to 12 inches of water was present in the drainage ditch. S&EE indicated that groundwater was found at about the same depth during drilling. The shallowest groundwater table in the project vicinity has an average depth of 15-feet below ground surface. It is anticipated that the depth of this shallow groundwater will vary with the season and precipitation levels. Based on the groundwater level, S&EE has included recommends for construction dewatering within the provided study. Overall, the report indicates that groundwater flow can be handled by sump pumps spaced at 50 to 100 feet along the ditch.

The Geotechnical Study provides recommendations for both the storm line and water line construction including recommendations for settlement, subgrade preparation in the existing ditch, pipe bedding, ditch fill, catch basin subgrade, trench excavation and backfill, thrust block design, and temporary and permanent slopes. Furthermore, the subject site is located within a seismic hazard area. Pursuant to the provided Geotechnical Study, the site is located within Seismic Zone 3 and is susceptible to liquefaction hazards. S&EE conclude that the soft subsoils of the site have a moderate to high liquefaction potential, therefore moderate to sever distortion to the storm line may occur. S&EE believe, that post-earthquake maintenance would be a reasonable mitigation option for the potential for liquefaction during a seismic event. Based on the potential for seismic and geological impacts, staff recommends a mitigation measure that the applicant comply with the recommendations within the Geotechnical Study, prepared by S&EE, Inc., dated March 17, 2010.

In the SEPA checklist the applicant indicated that they anticipate that construction would result in approximately 2,380 cubic yards of cut and approximately 2,450 cubic yards of fill. During site excavation, it is anticipated that erosion may occur along the slope of the ditch, specifically in the northern section of the ditch. The applicant has indicated that typical erosion control methods described in the 2009 City of Renton Stormwater Design Manual to control erosion from excavation and soil stockpiles would be utilized. This would include the use of filter fabric fences and catchbasin inlet protection. Stormwater would be diverted around the work area and sandbags and silt fencing would be used to keep any water and sediment out of the open channel of the ditch and stream.

Mitigation Measures: The applicant shall comply with the recommendations found within the Geotechnical Study, prepared by S&EE, Inc., dated March 17, 2010.

Nexus: SEPA Environmental Review, RMC 4-3-050 Critical Areas Regulations, RMC 4-4-060 Grading, Excavation and Mining Regulations.

2. Water

a. Wetland, Streams, Lakes

Impacts: The applicants submitted a "Wetland/Stream Study", prepared by Graham-Bunting Associates (GBA), dated May 12, 2009 and a Stream Assessment completed by Gray & Osborne, Inc. dated, June 16, 2010. The GBA study identified two streams, and one wetland within the vicinity of the project site.

The first stream is May Creek, which is a Shoreline of the State regulated under the Shoreline Management Act (SMA) and the City's Shoreline Master Program (SMP). The reach of May Creek near the project site has been designated as an Urban Shoreline pursuant to the City's SMP. May Creek runs through the south end of project area; it flows under Lake Washington Blvd. N into Lake Washington approximately 0.25 miles southwest of the subject property. The provided Wetland/Stream Study identified that no salmonids or resident fish species were observed during their site investigation, although May Creek is reportedly utilized by Chinook and Sockeye salmon. Furthermore, winter steelhead and cutthroat trout are also known to utilize the creek. The area of jurisdiction under the SMA and SMP extends 200 feet landward of the Ordinary High Water Mark (OHWM). The downstream portion of the new storm system is within 60 feet of May Creek and the new water line will cross May Creek in an existing 18-inch steel casing located within the May Creek Bridge. Under current conditions stormwater directly discharges into May Creek from the existing road side ditch. After the proposed project completion, discharge would remain in May Creek however, the subject project includes the addition of a wet bio swale to treat stormwater runoff prior to discharge into May Creek. Moreover, the subject project would result in improvements in the water quality discharging into the creek. The applicant has indicated that the creek itself would not be disturbed during construction and best management practices would be conducted to ensure the creek is protected from sediment flowing downstream during construction. No fill or dredge is proposed to be placed within May Creek. However, development will occur within 200-feet of the OHWM of May Creek; as such, the subject project would be subject to SMA and SMP regulations. The applicant has applied for a Shoreline Substantial Development Permit.

The second stream, which is also a drainage ditch located along Lake Washington Boulevard, was identified to be a Class 5 stream. This drainage ditch is located predominantly within the right of way of Lake Washington Blvd. N. Pursuant to the provided Study, flows for this stream are maintained by stormwater runoff from the north and the subject site. The City of Renton's Critical Areas Regulations identify Class 5 waters as "non-regulated non salmonid-bearing waters...". GBA also met with the Area Habitat Biologist from Washington State Department of Fish and Wildlife (WDFW) on April 24, 2009 to provide guidance and further observations of this ditch. WDFW concluded that the ditch was a man-made feature, and that work within the trench would not require Hydraulic Project Approval (HPA). Based on the consultation with the Area Habitat Biologist and observations gathered during the site investigation GBA determined that the drainage ditch is a non-salmonid bearing water. The location and profile of the ditch indicated that it is an artificially constructed channel designed and actively maintained to convey stormwater runoff from I-405, Lake Washington Boulevard, and the existing Pan Abode facility. As such GBA concluded that Criterion (a) of RMC 4-3-050.L.1.a.v. *Streams and Lakes Class 5 waters* is satisfied and therefore the subject Class 5 water would not be regulated. Within the drainage ditch, GBA also identified wetland characteristics. Based on the City's definition of Regulated and Non-regulated Wetlands GBA determined that the drainage ditch was intentionally created from a non-wetland site for the purpose of stormwater conveyance and is therefore a non-regulated wetland under the City's Critical Area Regulations

The project is located within the vicinity of the 100-year flood plain of May Creek. Pursuant to the Gray & Osborne assessment the 100-year flood elevation extends north from the OHWM of May Creek to the fence line of the Pan Abode Site and as much as 40 feet north beyond the fence. The 100-year flood elevations ranges from 26 to 32 MSL, feet across the site, however the subject project is approximately 55-feet outside the flood plain. As such, the project would not have impacts on the flood plain nor would the flood plain have impacts on the project.

Mitigation Measures: No further mitigation required.

Nexus: N/A

b. Ground Water

Impacts: The shallowest groundwater table in the project vicinity has an average depth of 15-feet below ground surface. It is anticipated that the depth of this shallow groundwater will vary with season and precipitation. The applicant has indicated if there is a high water table at time of construction, temporary pumping would be needed to keep the excavation dry. Any groundwater would be filtered to remove sediment and discharged back to the downstream storm system through the use of sediment and erosion control best management practices.

Mitigation Measures: No further mitigation required.

Nexus: N/A

c. Storm Water

Impacts: The proposed project is not anticipated to increase stormwater run off. However, the project proposes the addition of a wet bio swale to treat stormwater runoff prior to discharge into May Creek, resulting in improved stormwater conditions for the surrounding area. In addition, sidewalk is proposed to be made of porous concrete allowing for additional stormwater infiltration, effetely reducing the amount of stormwater run off that would be anticipated for a 12-foot wide sidewalk.

Mitigation Measures: No further mitigation required.

Nexus: N/A

3. Vegetation

Impacts: Pursuant to the provided Gray & Osborne, Inc. Stream Assessment, vegetation within the project area includes large big leaf maple, alder, and Japanese knotweed. Within the existing ditch, near the warehouse a few wetland grasses including reed canary grass were found. In the project vacancy, vegetation includes black cottonwoods, alders, vine maples, Canadian thistles, nettles, Indian plum, horsetail, alfalfa, clover and wild carrot. The riparian area of May Creek upstream of the project site is dominated by several red alders in addition to Japanese knotweed, Himalayan blackberries, salmonberry, nettles, sward fern, holly, horsetail, ivy, piggyback/youth-on-age, and a variety of grasses.

The proposed location of the subject project, immediacy adjacent to existing ROW, essentially eliminates potential impacts to significant trees or vegetation, with the exception of some grasses, weeds, Japanese knotweed, and a few small alders less then 4-inches in diameter.

Mitigation Measures: No further mitigation required.

Nexus: N/A

4. Wildlife

Impacts: The applicant submitted a "Wetland/Stream Study", prepared by Graham-Bunting Associates (GBA), dated May 12, 2009 a Stream Assessment completed by Gray & Osborne, Inc. dated, June 16, 2010. These reports also evaluated wildlife within are vicinity of the subject site in addition to streams. The report concludes that wildlife likely to occur on the site would be limited to species tolerant of traffic noise and human presence including deer, raccoons, opossums, squirrels, rodents, hawks and a variety of songbirds, crows, etc. Although located within the riparian area of May Creek, small mammals and birds were observed. The submitted report indicated that such wildlife as voles, blacktail deer, short tailed weasel, and a pair of Osprey were observed within this area. In addition to common species such as song sparrow, house finch, American crow and gull species were also observed within the riparian area. The reports indicate that other species such as reptiles and amphibians are likely to be present in the area including garter snakes, alligator lizards, salamanders and chorus frogs. In addition, south of the subject site in Lake Washington a nesting platform is maintained at the old Barbee Mill Site for ospreys and bald and golden eagles. As mentioned above the proposed development would be immediacy adjacent to and within the existing ROW of Lake Washington Blvd. N; as such, impacts to the habitat for the above mention species is not anticipated as a part of this development.

Mitigation Measures: No further mitigation required.

Nexus: N/A

5. Historic and Cultural Preservation

Impacts: The applicant completed an Archaeological Assessment subject to the provisions of the Washington State Governor's Executive Order 05-05. This assessment was completed by Landau Associates, dated December 24, 2009. The assessment concludes that no prehistoric or historic cultural resources were identified during the investigation and no further archaeological work was recommended for the subject project area. However, the assessment concludes that no prehistoric or historic cultural resources were identified during their investigation, the potential for such discoveries remain. The project area is in a high probability zone given its proximity to Lake Washington and ethnographic associations. The report recommends that if archaeological deposits of unevaluated significance are encountered during construction activities, ground disturbance should be halted and activities directed away from the area. If human skeletal remains are encountered during construction activities, all work activities should cease immediately. The area should be screened off, and the construction foreman should contact the necessary organizations. Based on the potential for cultural resources to be discovered within the project vicinity, staff recommends a mitigation measure that the applicant comply with the recommendation included within the Archaeological Assessment completed by Landau Associates, dated December 24, 2009.

Mitigation Measures: The applicant shall comply with the recommendation included within the Archaeological Assessment completed by Landau Associates, dated December 24, 2009.

Nexus: SEPA and EO 05-05

6. Transportation

Impacts: Construction of the proposed project would result in temporary traffic impacts. For the construction of the waterline, one lane of Lake Washington Blvd. N. would need to be reduced for short sections. The applicant proposes to use flaggers to permit one lane to be closed during

waterline construction. Reduced speeds are anticipated during the storm pipe and manhole construction. Traffic signs and cones are proposed to be utilized to provide safety for traffic and pedestrians passing through the area. Biking access would remain open during construction.

Mitigation Measures: No further mitigation required.

Nexus: N/A

E. Comments of Reviewing Departments

The proposal has been circulated to City Department and Division Reviewers. Where applicable, their comments have been incorporated into the text of this report and/or "Advisory Notes to Applicant."

✓ **Copies of all Review Comments are contained in the Official File and may be attached to this report.**

Environmental Determination Appeal Process: Appeals of the environmental determination must be filed in writing on or before 5:00 PM, August 6, 2010.

Renton Municipal Code Section 4-8-110.B governs appeals to the Hearing Examiner. Appeals must be filed in writing at the City Clerk's office along with the required fee. Additional information regarding the appeal process may be obtained from the City Clerk's Office, Renton City Hall - 7th Floor, 1055 S. Grady Way, Renton WA 98057.

ADVISORY NOTES TO APPLICANT

The following notes are supplemental information provided in conjunction with the administrative land use action. *Because these notes are provided as information only, they are not subject to the appeal process for the land use actions.*

Planning:

1. RMC section 4-4-030.C.2 limits haul hours between 8:30 am to 3:30 pm, Monday through Friday unless otherwise approved by the Development Services Division.
2. Commercial, multi-family, new single family and other nonresidential construction activities shall be restricted to the hours between seven o'clock (7:00) a.m. and eight o'clock (8:00) p.m., Monday through Friday. Work on Saturdays shall be restricted to the hours between nine o'clock (9:00) a.m. and eight o'clock (8:00) p.m. No work shall be permitted on Sundays.
3. Within thirty (30) days of completion of grading work, the applicant shall hydroseed or plant an appropriate ground cover over any portion of the site that is graded or cleared of vegetation and where no further construction work will occur within ninety (90) days. Alternative measures such as mulch, sodding, or plastic covering as specified in the current King County Surface Water Management Design Manual as adopted by the City of Renton may be proposed between the dates of November 1st and March 31st of each year. The Development Services Division's approval of this work is required prior to final inspection and approval of the permit.

Plan Review - Water:

1. All fire hydrants must be capable of delivering a minimum of 1,000 GPM.
2. Water System Development Fees are not triggered by this project.

Plan Review – Sewer:

1. Sanitary sewer requirements are not triggered by this project.
2. Sanitary Sewer System Development Fees are not triggered by this project.

Plan Review – Storm drainage:

1. Storm Water System Development Fees are not triggered by this project

Plan Review – Transportation:

1. All street restoration shall be per the current City of Renton Trench Restoration and Street Overlay Requirements details.
2. Traffic Mitigation Fees are not triggered by this project.
3. Any existing pavement markings and channelization (ie, bike lane) and signing disturbed during construction will need to be replaced in kind by this project.

Plan Review – General:

1. All required utility, drainage and street improvements will require separate plan submittals prepared according to City of Renton drafting standards by a licensed Civil Engineer.
2. All plans shall be tied to a minimum of two of the City's current horizontal and vertical control plan

Fire Department:

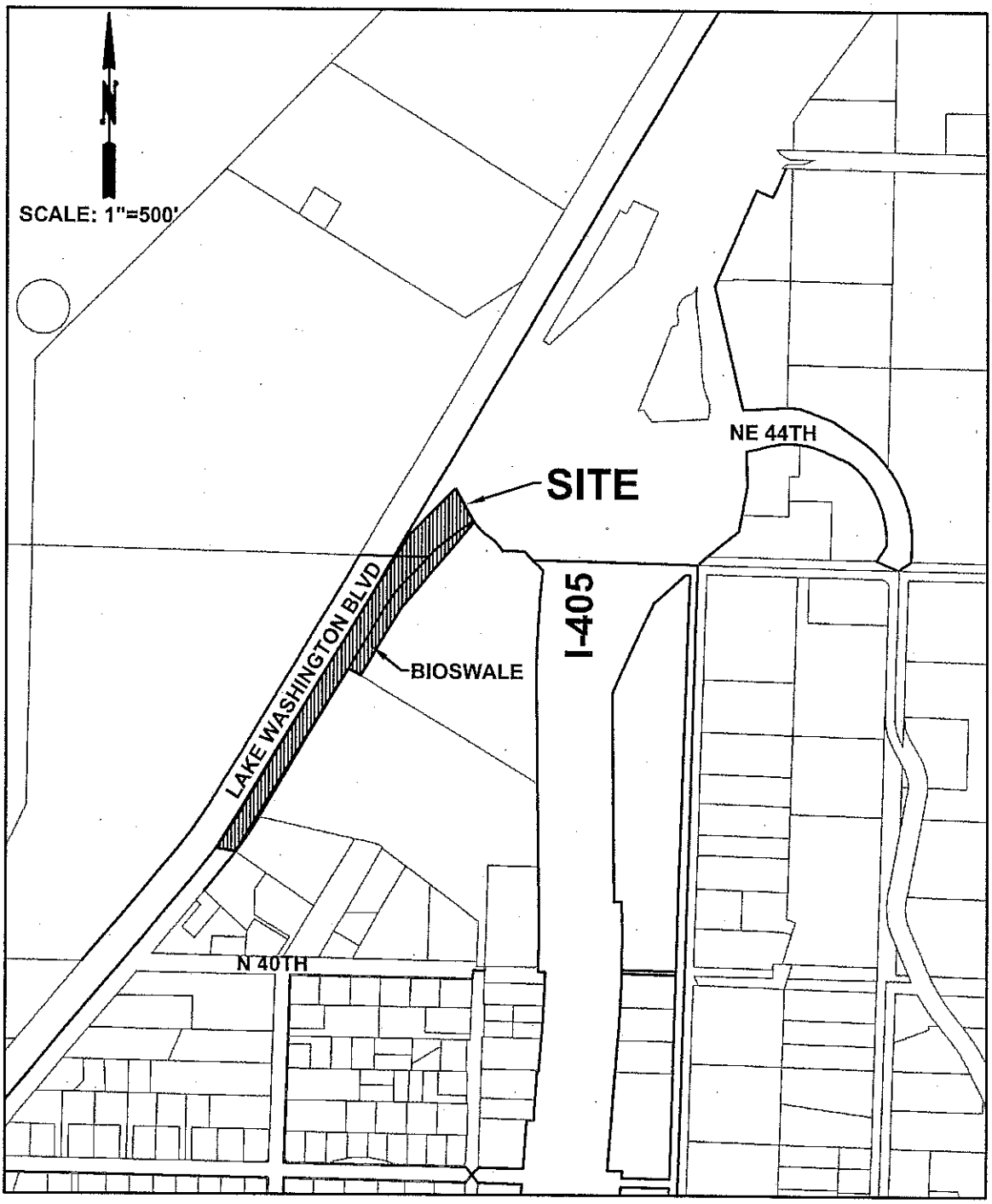
1. The project shall meet City fire hydrant ordinances with regards to spacing of a maximum of 300-feet in commercial districts.

Property Services:

1. No monuments were noted on the plan; if there are any in the field that would be affected by construction, a permit should be obtained pursuant to RCW 332-120-040.

Parks:

1. Recommends modification to plan details for sidewalk and landscape strip to reflect what is included on plans.
2. Recommends irrigation and irrigation contour to be included as a part of design. For detailed irrigation requirements coordinate with Urban Forestry and Natural Resources Manager. Irrigation should be designed to accommodate a turf landscape strip.



City of Renton
Planning Division

JUN 24 2010

RECEIVED

CITY OF RENTON
LAKE WASHINGTON BLVD
STORM AND WATER SYSTEM IMPROVEMENTS
NEIGHBORHOOD MAP

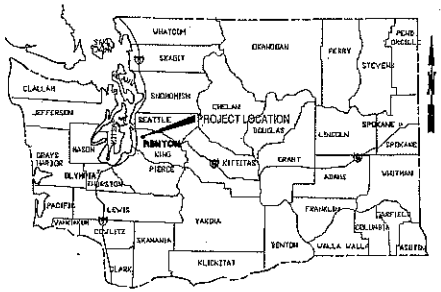
Gray & Osborne, Inc.
CONSULTING ENGINEERS

EXHIBIT 1

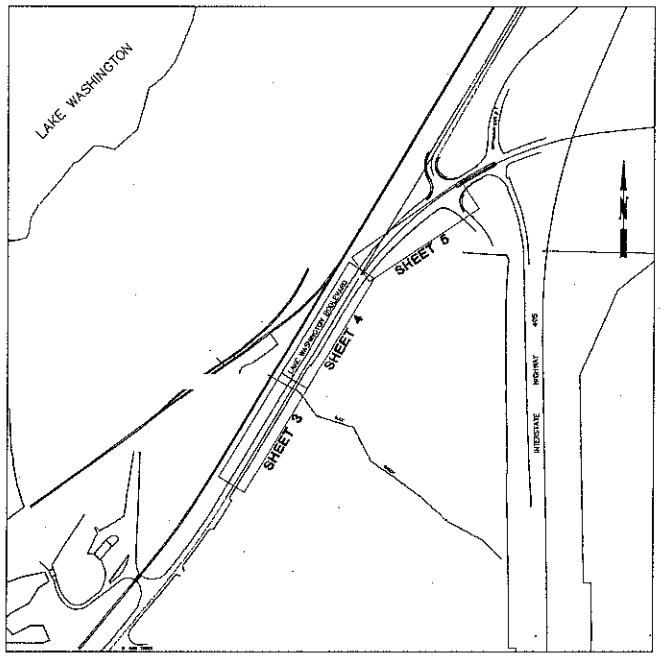
M:\RENTON\09583 Lk Wa Blvd - Hawks Landing Storm-Water Imps\Permits\NEIGHBORHOOD MAP.dwg, Layout1, 6/3/2010 3:59:11 PM, ckirk

XXX-XX-XXXX

CITY OF RENTON
LAKE WASHINGTON BLVD. HAWKS LANDING STORM AND WATER SYSTEM IMPROVEMENT PROJET
PROJECT SWP-27-3531



VICINITY MAP
NOT TO SCALE



PROJECT PLAN
SCALE: 1"=200'

INDEX

SHEET NO.	DESCRIPTION
1	COVER VICINITY & LOCATION MAPS AND INDEX
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3–5	STORM DRAINAGE IMPROVEMENT PLAN & PROFILE
6	UTILITY DETAILS
7	WATER LINE RESTRAINT DETAIL

CHECKED FOR COMPLIANCE WITH CITY STANDARDS
By:_____ Date:_____
By:_____ Date:_____
By:_____ Date:_____
By:_____ Date:_____

RECOMMENDED FOR APPROVAL
By:_____ Date:_____
By:_____ Date:_____
By:_____ Date:_____
By:_____ Date:_____

PROPERTY LINE DISCLAIMER

The property lines shown hereon are based on available information, not on a surveyed location and are only approximate.

RANDY P. BAKER — STATE OF WASHINGTON — 37328 — REGISTERED PROFESSIONAL ENGINEER

STACEY ANN CLARK — STATE OF WASHINGTON — 23311 — REGISTERED PROFESSIONAL ENGINEER

D-3531d1

Gray & Osborne, Inc.
CONSULTING ENGINEERS
701 DEXTER AVENUE NORTH, SUITE 200
SEATTLE, WASHINGTON 98109 (206) 284-0466

PRELIMINARY NOT FOR CONSTRUCTION

NO.	REVISION	BY	DATE	APPR

DESIGNED: B.P.B.
DRAWN: G.J.K.
CHECKED: S.A.C.
APPROVED: B.P.B.

DATUM

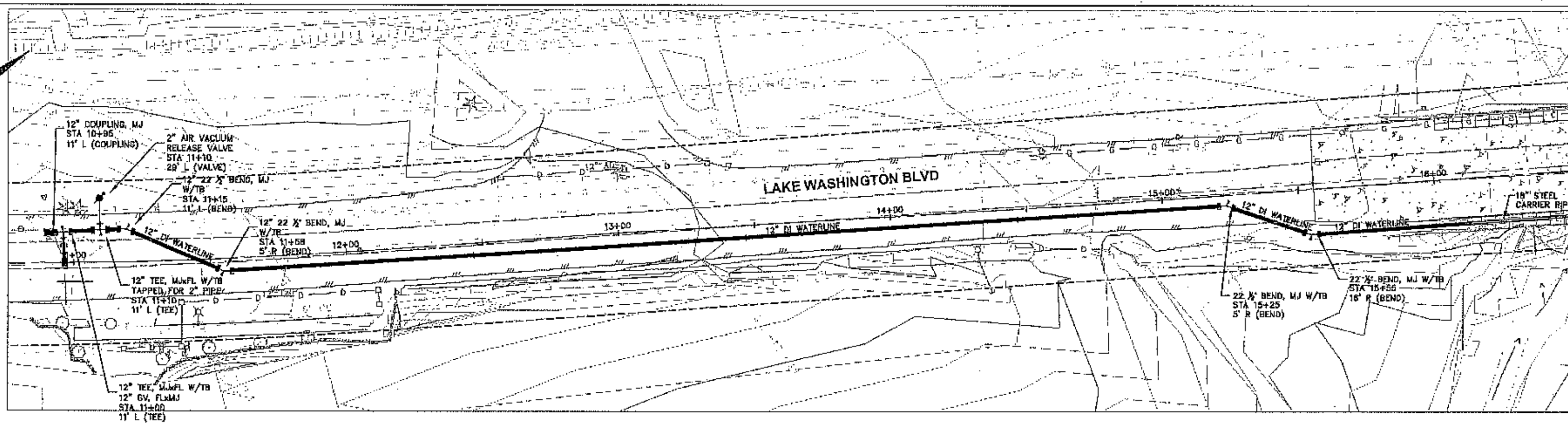
CITY OF RENTON
Planning/Building/Public Works Dept.

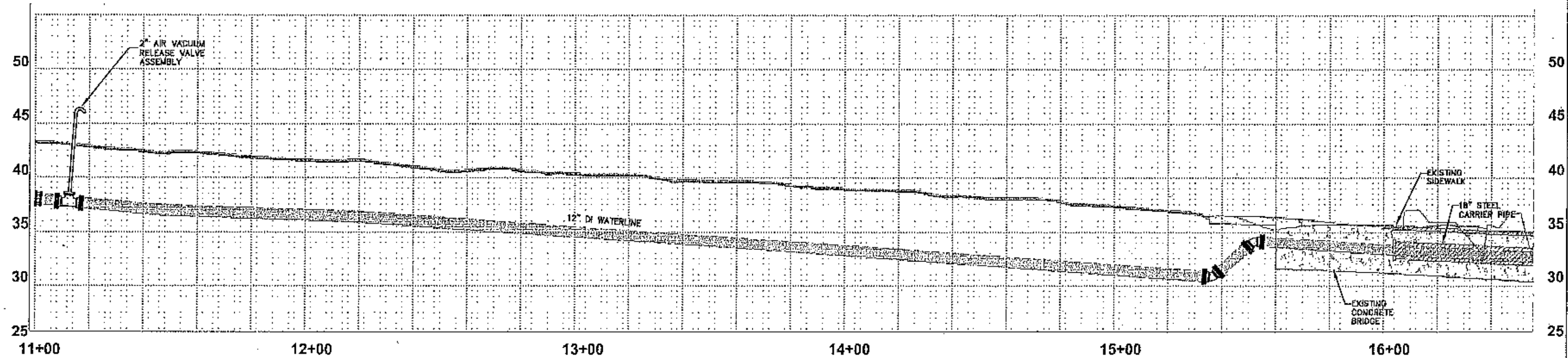
LAKE WASHINGTON BLVD
HAWKS LANDING STORM WATER
IMPROVEMENTS

DATE: 2/26/10
DRAWING NO.: COVER
SHEET NO.: 1 OF 7

EXHIBIT 2

XXXX-XX-XXX



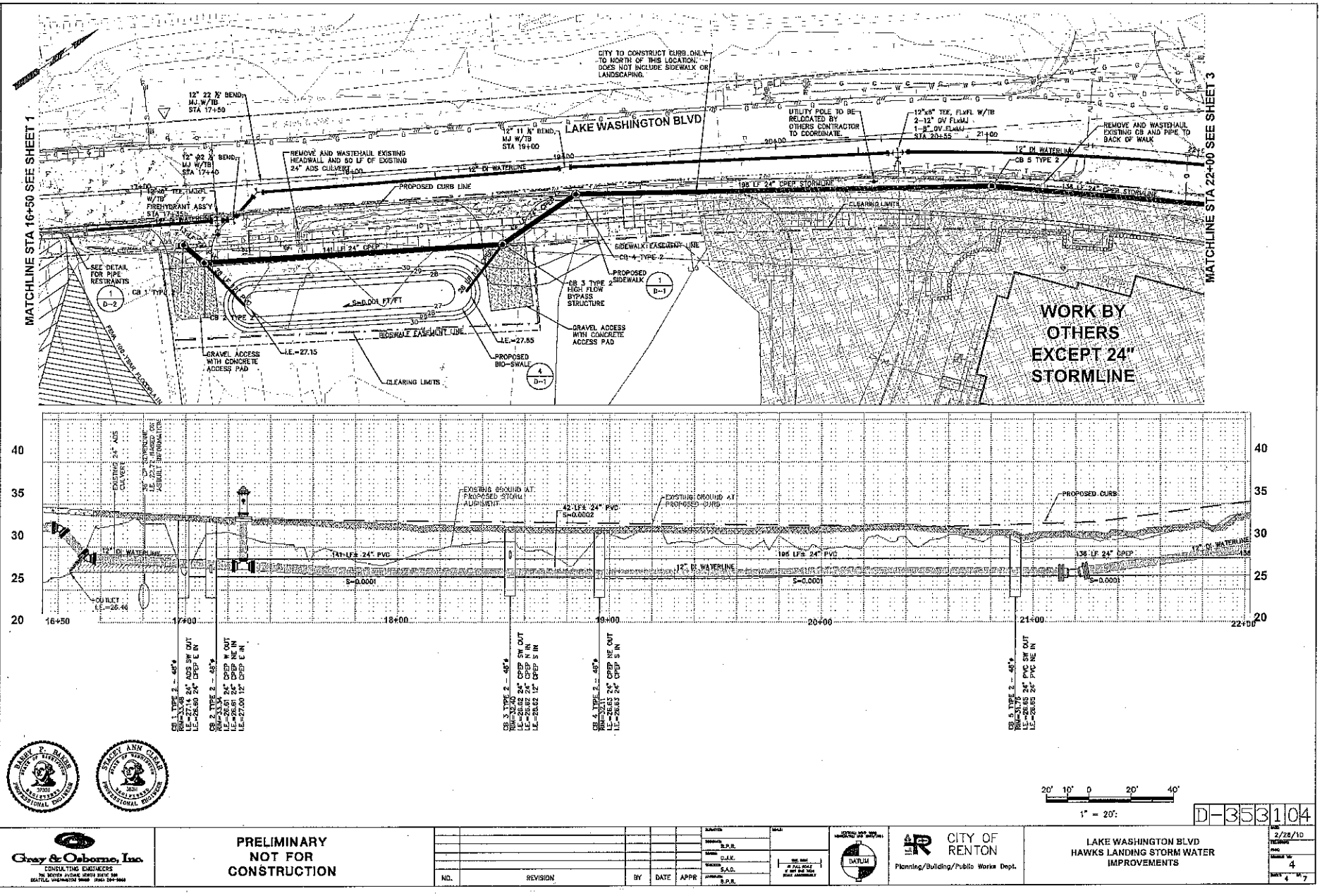


20' 10' 0 20' 40'
1" = 20'

D-353103

Gray & Osborne, Inc. CONSULTING ENGINEERS	PRELIMINARY NOT FOR CONSTRUCTION	NO. / REVISION / BY / DATE / APPR	B.P.B. / C.J.K. / S.A.C. / B.P.B.	DATUM
CITY OF RENTON Planning/Building/Public Works Dept.	LAKE WASHINGTON BLVD HAWKS LANDING STORM WATER IMPROVEMENTS	2/26/10	3	3 of 7

EXHIBIT 3



1" = 20'

D-353104

Gray & Osborne, Inc.
CONSULTING ENGINEERS
SEATTLE, WASHINGTON

PRELIMINARY
NOT FOR
CONSTRUCTION

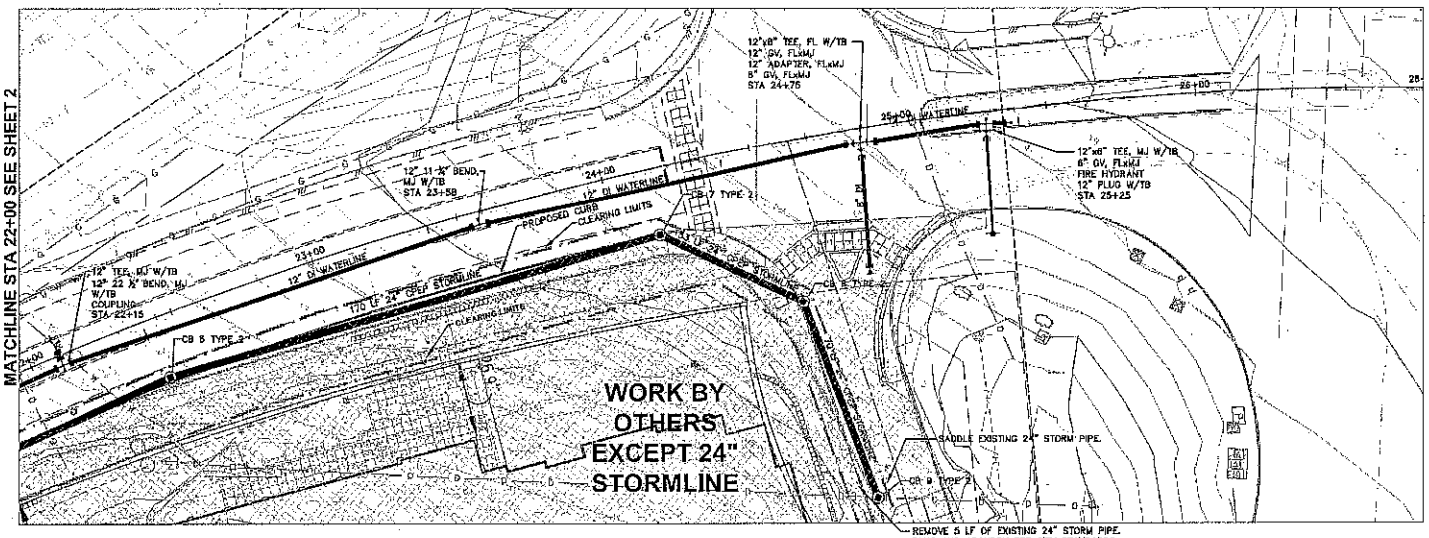
NO.	REVISION	BY	DATE	APPR

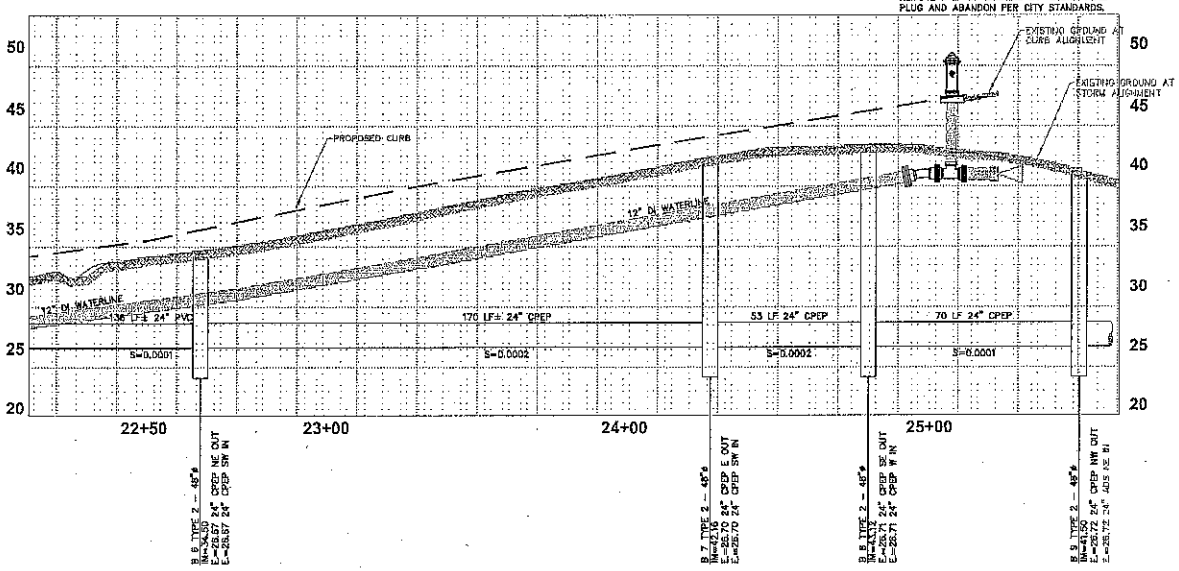
CITY OF RENTON
Planning/Building/Public Works Dept.

LAKE WASHINGTON BLVD
HAWKS LANDING STORM WATER
IMPROVEMENTS

DATE 2/28/10
SHEET 4 OF 7

EXHIBIT 4





20' 10' 0 20' 40'
1" = 20'

D-353105

Gray & Osborne, Inc.
CONSULTING ENGINEERS

PRELIMINARY
NOT FOR
CONSTRUCTION

NO.	REVISION	BY	DATE	APPR

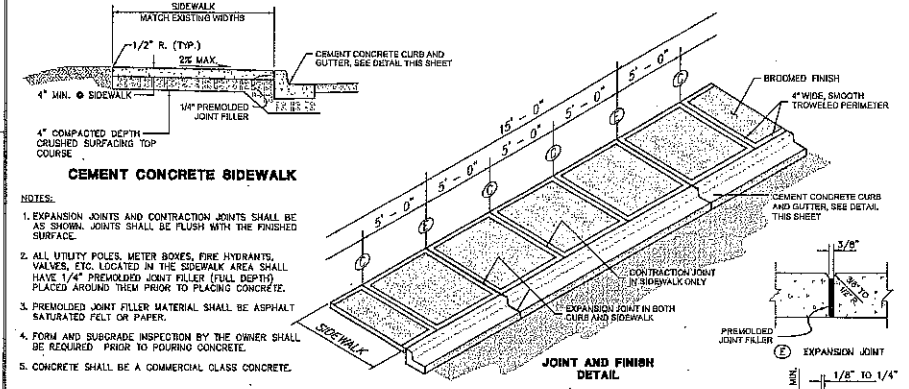
DESIGNED B.P.B.
DRAWN D.M.Y.
CHECKED S.A.C.
APPROVED B.P.B.

CITY OF RENTON
Planning/Building/Public Works Dept.

LAKE WASHINGTON BLVD
HAWKS LANDING STORM WATER
IMPROVEMENTS

DATE 2/26/10
SHEET NO. 5

EXHIBIT 5



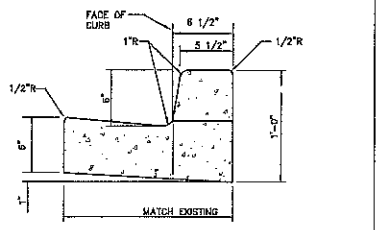
CEMENT CONCRETE SIDEWALK

NOTES:

1. EXPANSION JOINTS AND CONTRACTION JOINTS SHALL BE AS SHOWN. JOINTS SHALL BE FLUSH WITH THE FINISHED SURFACE.
2. ALL UTILITY POLES, METER BOXES, FIRE HYDRANTS, VALVES, ETC. LOCATED IN THE SIDEWALK AREA SHALL HAVE 1/4" PREMOLDED JOINT FILLER (FULL DEPTH) PLACED AROUND THEM PRIOR TO PLACING CONCRETE.
3. PREMOLDED JOINT FILLER MATERIAL SHALL BE ASPHALT SATURATED FELT OR PAPER.
4. FORM AND SUBGRADE INSPECTION BY THE OWNER SHALL BE REQUIRED PRIOR TO POURING CONCRETE.
5. CONCRETE SHALL BE A COMMERCIAL CLASS CONCRETE.

JOINT AND FINISH DETAIL

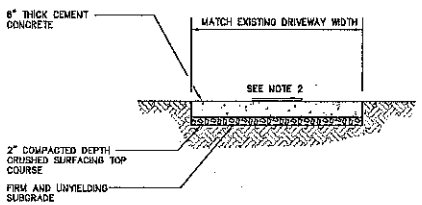
CEMENT CONC. SIDEWALK DETAIL (1/-)
NOT TO SCALE



GENERAL NOTES:

1. PREMOLDED JOINT FILLER SHALL BE ASPHALT SATURATED FELT OR PAPER.
2. FORM AND SUBGRADE INSPECTION SHALL BE REQUIRED PRIOR TO POURING CONCRETE.
3. INSTALL ON A 2" COMPACTED DEPTH LAYER OF CRUSHED SURFACING TOP COURSE.
4. CONCRETE SHALL BE A COMMERCIAL CLASS CONCRETE.

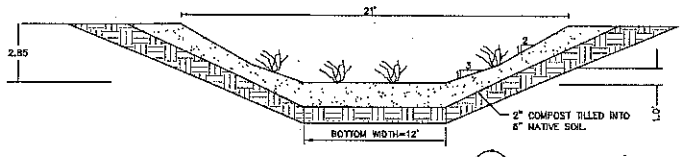
CEMENT CONC. TRAFFIC CURB AND GUTTER (2/-)
NOT TO SCALE



NOTES:

1. CONCRETE SHALL BE A CLASS 4000 MIX.
2. DRIVEWAY SLOPES SHALL NOT EXCEED 2% (MAX) CROSS SLOPE AND 12:1 (MAX) LONGITUDINAL SLOPE.

CEMENT CONCRETE DRIVEWAY REPAIR (3/-)
NOT TO SCALE

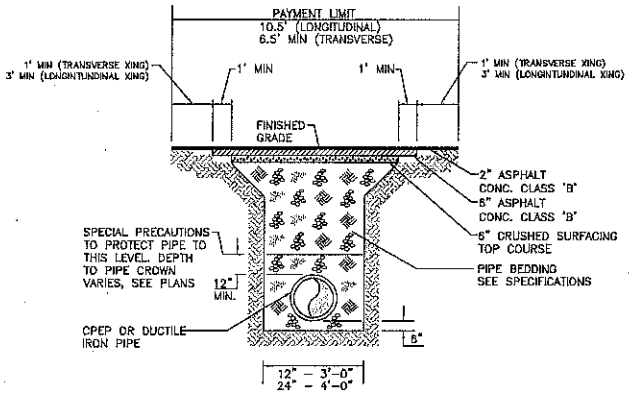


WET BIOSWALE CROSS SECTION (4/4)
NOT TO SCALE

1. PLANTS WITHIN THE WET BIOSWALE SHALL BE TOLERANT OF PONDING FLUCTUATIONS AND SATURATED SOIL CONDITIONS AND DROUGHT DURING THE SUMMER MONTHS. ALLOWABLE PLANTS AND SPACING ARE SHOWN IN TABLE 1.

TABLE 1
ALLOWABLE PLANTS AND SPACING

Common Name	Spacing (On Center)
Western mannagrass	Seed
Velvetgrass	Seed
Shortawn foxtail	Seed
Water foxtail	Seed
Spike rush	4 inches
Slough sedge	6 inches or seed
Sawbeak sedge	6 inches
Sedge	6 inches
Slender rush	6 inches
Water parsley	6 inches
Hardstem bulrush	6 inches
Watercress	12 inches
Small-fruited bulrush	12 inches



TYPICAL ROAD RESTORATION / TRENCH SECTION (5/-)
NOT TO SCALE

D-3531D1

Gray & Osborne, Inc.
CONSULTING ENGINEERS
705 SECOND AVENUE, SUITE 501
SEATTLE, WASHINGTON 98104-1798

PRELIMINARY NOT FOR CONSTRUCTION

NO.	REVISION	BY	DATE	APP'D

DESIGNED B.P.B.
DRAWN G.J.K.
CHECKED S.A.C.
APPROVED B.P.B.

DATUM

CITY OF RENTON
Planning/Building/Public Works Dept.

LAKE WASHINGTON BLVD
HAWKS LANDING STORM WATER IMPROVEMENTS

2/26/10
D-1

EXHIBIT 6